

PCT

REC'D 24 AUG 2004

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

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Applicant's or agent's file reference F38785WO tge	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP 03/13178	International filing date (day/month/year) 24.11.2003	Priority date (day/month/year) 22.11.2002
International Patent Classification (IPC) or both national classification and IPC G05G1/14		
Applicant FICO CABLES S.A. et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 5 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 22.06.2004	Date of completion of this report 25.08.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized Officer Vermander, W Telephone No. +31 70 340-3904



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/EP 03/13178**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-12 as originally filed

Claims, Numbers

1-23 received on 07.07.2004 with letter of 07.07.2004

Drawings, Sheets

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-23
	No: Claims	
Inventive step (IS)	Yes: Claims	1-23
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-23
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following document:
D1: WO01/76924
2. The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and shows (the references in parentheses applying to this document): An adjustable pedal assembly (10), in particular for use in a motor vehicle having a subpedal (22), which is pivotally mounted at the motor vehicle (20); a pedal (42), which is slidably arranged at the subpedal (22) by a first slide link (30), at least one positioning element (30,48) which is pivotally mounted at the subpedal (22) and slidably mounted at the pedal (42) by a second slide link (48) so that the pedal (42) glides relative to the subpedal (22) during a pivoting of the positioning element (30,48) effected by means of an actuator (52) acting on the positioning element (30,48) or on the pedal (42).
 - 2.1 From this known adjustable pedal assembly the subject-matter of claim 1 differs in that the positioning element is additionally mounted at the pedal by a third slide link separate from the second slide link.
 - 2.2 The subject-matter of claim 1 is therefore new (Article 33(2) PCT).
3. The problem to be solved by the present invention may be regarded as providing an improved adjustable pedal assembly resistant to high loads.
4. The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons: a positioning element mounted to the pedal as defined in claim 1 is neither known nor rendered obvious from the prior art.
5. Claims 2-23 are dependent on claim 1 and as such also meet/s the requirements of the PCT with respect to novelty and inventive step.

PCT/EP03/13178
FICO CABLES, S.A.

July 7, 2004
F38785WO HS/kij/aj

Patent claims

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1. Adjustable pedal assembly (20), in particular for use in a motor vehicle, comprising:

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a. a subpedal (1), which is pivotably mounted at the motor vehicle;

b. a pedal (4), which is slideably arranged at the subpedal (1) by a first slide link (6, 7);

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c. at least one positioning element (8), which is pivotably mounted at the subpedal (1) and slideably mounted at the pedal (4) by a second slide link (10, 12), so that

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d. the pedal (4) glides relatively to the subpedal (1) during a pivoting of the positioning element (8) effected by means of an actuator acting on the positioning element (8) or on the pedal (4), characterized in that

e. the positioning element (8) is additionally mounted at the pedal (4) by a third slide link (11, 13) separate from the second slide link (10, 12).

25 2. Adjustable pedal assembly in accordance with claim 1, wherein the positioning element (8) consists only of a single element, which is mounted at the pedal (4) by said two separate slide links (10, 12; 11, 13).

- 2 -

3. Adjustable pedal assembly in accordance with one of the claims 1 or 2, wherein the subpedal (1) comprises a first elongated guide (7) and wherein the pedal (4) is slideably supported within this first elongated guide (7) by a link, so that the pedal (4) is adjustable substantially in parallel to the vehicle's longitudinal axis.
4. Adjustable pedal assembly in accordance with one of claims 1 to 3, wherein the pedal (4) comprises a second (12) and a third (13) elongated guide.
5. Adjustable pedal assembly in accordance to claim 4, wherein the paths of the first, second and third elongated guides (7, 12, 13) are arranged such that when a force is applied to a foot-piece (14) of the pedal (4) to operate it, a locking in relative movement of the subpedal (1), the pedal (4) and the positioning element (8) to each other is produced.
6. Adjustable pedal assembly in accordance with one of the claims 4 or 5, wherein the paths of the three elongated guides (7, 12, 13) are arranged, so that the foot-piece (14) of the pedal (4) follows a predetermined trajectory during the adjustment of the pedal (4).
7. Adjustable pedal assembly in accordance with one of claims 4 - 6, wherein the pedal (4) comprises a first pin (6), engaging the first elongated guide (7), wherein the positioning element (8) comprises a second pin (10), engaging the second elongated guide (12), and wherein the positioning element (8) comprises a third pin (11), engaging the third elongated guide (13), wherein said pins (6, 10, 11) and said elongated guides (7, 12, 13) constitute said first, second and third slide links (6, 7; 10, 12; 11, 13).
8. Adjustable pedal assembly in accordance with one of claims 4 - 7, wherein the paths of the elongated guides (7, 12, 13) are substantially in parallel to a plane defined by the vehicle's longitudinal axis and the vehicle's vertical axis.

9. Adjustable pedal assembly in accordance with one of claims 3 - 8, wherein the path of the first elongated guide (7) is substantially straight.
- 5 10. Adjustable pedal assembly in accordance with one of claims 4 - 9, wherein the paths of the second (12) and the third (13) elongated guide are curved.
- 10 11. Adjustable pedal assembly in accordance with one of claims 3 - 10, wherein the path of the first elongated guide (7) is arranged substantially horizontal when the pedal (4) is not actuated.
12. Adjustable pedal assembly in accordance with one of claims 1 - 11, wherein the positioning element (8) is pivotable around an axis (9), which is substantially in parallel to the vehicle's transverse axis.
- 15 13. Adjustable pedal assembly in accordance with one of claims 1 - 12, wherein the rotation point (9) of the positioning element (8) is located below the rotation point (3) of the subpedal (1).
- 20 14. Adjustable pedal assembly in accordance with claim 13, wherein the path of the first elongated guide (7) is directed between the rotation point (3) of the subpedal (1) and the rotation point (9) of the positioning element (9).
- 25 15. Adjustable pedal assembly in accordance with one of claims 1 - 12, wherein the rotation point (9) of the positioning element (8) is located above the rotation point (3) of the subpedal (1).
- 30 16. Adjustable pedal assembly in accordance with claim 15, wherein the path of the first elongated guide (7) runs above the rotation point (3) of the subpedal (1).

17. Adjustable pedal assembly in accordance with one of claims 4 - 16, wherein the sub-pedal (1) comprises two external parallel walls, which are mechanically connected, wherein the at least one positioning element (8) and the pedal (4) are mounted in-between the two walls by means of the elongated guides (7, 12, 13) and the corresponding pins (6, 10, 11).
18. Adjustable pedal assembly in accordance with one of claims 1 - 17, wherein said at least one positioning element (8) comprises a V-shaped plate, which is pivotably mounted at the vertex of the V-shaped plate and wherein said second and third pins (10, 11) are arranged at the arms of the V-shaped plate.
19. Adjustable pedal assembly in accordance with one of claims 1 - 18, wherein said actuator acting on the positioning element (8) or the pedal (4) is driven by an electric motor.
20. Adjustable pedal assembly in accordance with one of claims 1 - 18, wherein said actuator acting on the positioning element (8) or the pedal (4) is manually driven.
21. Adjustable pedal assembly in accordance with one of claims 19 or 20, wherein said actuator acting on the positioning element (8) or the pedal (4) is driven either by means of a toothed wheel gearing, a spindle gearing, a cam gearing, a chain drive, a belt drive, or a V-belt drive, a flexible shaft, or by a combination of said gearings.
22. A pedal unit comprising at least two of the pedal assemblies in accordance with one of claims 19 - 21, wherein the at least two of the pedal assemblies (20) are grouped together such that the positioning elements (8) or the pedals (4) of the pedal assemblies (20) are jointly driven for a joint adjustment.

- 5 -

23. A pedal unit in accordance with claim 22, wherein only a single common adjustment means is used for adjustment.